



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

AUG 11 2008

Dr. Jane Summerson  
EIS Document Manager  
Regulatory Authority Office  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy  
1551 Hillshire Dr., M/S 011  
Las Vegas , NV 89134

Dear Dr. Summerson:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA) and the National Environmental Policy Act, the Environmental Protection Agency (EPA) has reviewed the Department of Energy's (DOE) Final Supplemental Environmental Impact Statement (SEIS) on the Nevada Rail Transportation Corridor for the proposed Yucca Mountain Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste (CEQ #20080264) and Final Environmental Impact Statement (EIS) for a Rail Alignment for the Construction and Operation of a Railroad in Nevada to the proposed Yucca Mountain Repository (CEQ #20080265).

Comments on the Nevada Rail Corridor Final SEIS

As stated in our January 10, 2008 comment letter on the draft SEIS, EPA supports DOE's conclusion to evaluate potential alignments in the Caliente and Mina Rail Corridors. We understand that the Walker River Paiute Tribe continues to object to a rail line transporting nuclear waste across its Reservation. As a result, the Mina rail corridor was designated as the "non-preferred" alternative. *Appendix F Floodplain and Wetlands Assessment* of the Rail Alignment final EIS provides additional information on the floodplain and wetlands associated with the Caliente, Mina and Eccles rail alignments. Additional information is also provided regarding potential impacts to wetlands and proposed modifications to the alignment alternatives to minimize wetland impact. Accordingly, we reiterate that EPA does not have any concerns about this project.

## Comments on the Rail Alignment Final EIS

DOE proposes to construct and operate a railroad in Nevada to transport spent nuclear fuel, high-level radioactive waste, and other materials to a repository at Yucca Mountain. DOE intends to implement this action through the use of the Caliente Rail Corridor.

EPA appreciates the efforts DOE has made to address our comments on the Rail Alignment Draft EIS. The revised *Appendix F, Floodplain and Wetlands Assessment*, includes an analysis of how the proposed discharges of fill material associated with the construction of the rail line and support facilities would meet the requirements of the Clean Water Act Section 404(b)(1) Guidelines (“Guidelines”). The Final EIS provides additional clarification regarding: 1) the extent of waters of the U.S. that may be impacted by the proposed alignments; 2) a description of the nature of the potential impacts; and 3) a differentiation between impacts that would occur from construction of the rail line, staging yards, interchange yards and quarries. The final EIS also contains additional information regarding the practicability of the Eccles and Mina alternatives. In addition, DOE evaluates rail alignment alternatives to minimize impacts to waters of the U.S.

According to the information in Appendix F, direct impacts to waters of the U.S. resulting from the preferred project alignment have been reduced from up to 81 acres to 8.6 acres (Table F-6). DOE evaluated alternatives to avoid wetlands. Based on that evaluation, there is no location in the Caliente Rail Corridor that would completely avoid all wetlands.

Further analysis was conducted to minimize the amount of wetland fill along the Caliente alternative segment. The construction right-of-way along this segment would be reduced to 30 meters to minimize wetlands impacts (F-26). In addition, in some areas (*e.g.*, Bennett Springs Wash), the roadbed was shifted to avoid additional wetlands (F-27), and the rail line would be constructed on the abandoned Union Pacific Railroad road bed. In addition, where practicable, bridge abutments would be placed out of wetlands (F-27). Through an evaluation of alternatives, DOE is also proposing to place the staging yard to the west of the abandoned rail road bed at the Upland Site avoiding all wetlands as compared to the Indian Cove Staging Area (47.0 acres) (F33-34), and has proposed a quarry siding site with less wetlands impacts from two locations originally being considered (F-34).

DOE also examined other locations in eastern Nevada to interface with the Union Pacific Railroad Mainline, such as existing sidings between the Utah border and Caliente, but could not find a practicable location with sufficient flat terrain to construct an interchange yard or an associated alignment that would not exceed the maximum allowable grade or other design requirements (F-66).

Based on the additional information and analysis provided in the final EIS (Appendix F), it appears that the preferred Caliente alignment, as described in the final EIS, represents the least environmentally damaging practicable alternative.

In our comments on the draft EIS, we requested DOE provide a detailed compensatory mitigation plan for unavoidable impacts. The Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material, require compensatory mitigation for unavoidable impacts to waters (see 40 CFR 230.10(d) and 40 CFR Part 230, Subpart J, 73 Fed. Reg. 19594). The final EIS identifies compensatory mitigation options for the wetland impacts associated with the preferred alignment (F-73). These options include onsite restoration/creation and enhancement (*e.g.*, cattle exclusion fencing, riparian plantings), as well as off-site mitigation through a partnership with BLM (*e.g.*, riparian plantings, fish passage barrier removals, instream debris removal). However, while some of these options appear viable, the proposed mitigation is too conceptual at this time to determine whether it would adequately compensate for the loss of 8.6 acres of wetlands, as required by the Guidelines. Further, we note that EPA generally does not support cattle exclusion along the railroad right-of-way as part of the compensatory mitigation plan to offset impacts to aquatic resources. Typically, fencing of these areas is conducted to prevent cattle from accessing the rail line and causing any rail mishaps.

The wetlands that will be impacted by the Caliente rail alignment alternative represent one of the few remaining riparian areas in southern Nevada that support mature native vegetation. These wetlands provide habitat for wildlife, including the endangered southwestern willow flycatcher. To achieve adequate replacement of lost acreage and function, EPA recommends implementing one of the following compensatory mitigation options:

- 1) 3:1 restoration or creation of wetlands of equivalent function within the watershed.
- 2) 1:1 restoration or creation of wetlands of equivalent function within the watershed, and 5:1 non-native plant removal within the watershed.
- 3) 1:1 restoration or creation of wetlands of equivalent function within the watershed, and 5:1 enhancement of the riparian wetland habitat in Upper Meadow Valley, including Rainbow Canyon.

The mitigation ratios presented above are based on: 1) the uncertainty of the science of mitigation; 2) the challenges associated with wetland creation/restoration in an arid environment; and 3) the temporal loss of function until the wetland matures. Each of the mitigation options includes a minimum 1:1 restoration/creation component. The higher ratios for enhancement (*e.g.*, non-native plant removal and riparian plantings) account for the fact that enhancement does not replace lost wetland acreage. Enhancement provides a lift to specific functions within the suite of functions these wetlands perform. These mitigation ratios are also based on the assumption that the specific wetland restoration/creation and enhancement projects will complement restoration and enhancement efforts currently underway in the Meadow Valley Wash watershed.

Moreover, as part of the restoration and enhancement, a monitoring and management plan must be developed and implemented, consistent with the requirements of the Wetlands Compensatory Mitigation Rule found in 40 CFR 230.94-230.97 (73 FR 19594, published April 10, 2008). Further, the Army Corps of Engineers' Sacramento District has developed its Mitigation and Monitoring Proposal Guidelines, December 30, 2004, which recommends a mitigation monitoring period of 10 years, with the possibility of demonstrating success in 7 years. In addition, DOE should implement Best Management Practices to control storm water discharges during project construction to minimize impacts to the water quality from the proposed project.

### Conclusion

As noted above, EPA agrees with the conclusions of the Nevada Rail Corridor final SEIS and does not object to the implementation of this action. Regarding the Rail Alignment final EIS, EPA supports the conclusions of the *Floodplain and Wetlands Assessment* contained in Appendix F, provided that DOE provides adequate compensatory mitigation for wetland losses, as discussed above. It is our understanding, based on our July 16, 2008, conference call, that DOE will provide a more detailed compensatory mitigation plan in the Record of Decision (ROD).

We appreciate the opportunity to review and comment on this document and look forward to continued collaboration on this project as it moves forward to the final design stage. Should there be modifications to the project as its currently proposed in the final EIS, we request that DOE resubmit a revised *Floodplain and Wetlands Assessment* as well as the mitigation plan for review. We also request a copy of the ROD upon its conclusion.

We appreciate the opportunity to review and comment on these documents. If you have any further questions you may contact me at (202) 564-5400. You may also call my staff point of contact, Marthea Rountree. She can be reached at (202) 564-7141.

Sincerely,

A handwritten signature in black ink that reads "Susan E. Bromm". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Susan E. Bromm  
Acting Director  
Office of Federal Activities